

**Amendments to the Drawings:**

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Fig. 1A-1B, replaces the original sheet. Figure 1A shows the plate in the correct orientation to the vertebra. Figure 1B has been added showing the plate in the orientation originally depicted in Figure 1, without a pictorial of the vertebra.

Figure 2 includes previously omitted element reference number 15' illustrating the location of the countersunk screw holes stated on page 5, line 19 of the specification.

Figure 5 includes previously omitted element reference number 34 illustrating the location of the thinned edge stated on page 7, line 7.

All drawings have been made formal.

Attachment: Replacement Sheet for Figures 1-5

Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

Claims 1 through 17 remain in this application.

In response to the Office Action of January 19, 2007, Applicant requests re-examination and reconsideration of this application for patent pursuant to 35 U.S.C. 132.

**Rejections under 35 USC 112**

Claims 2-4, 7-10 and 13 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

With regard to claims 2, 4, and 14 the Examiner states that; "...the relative position and/or orientation of the diverging axes is unclear, since the drawings appear to show the axes diverging as between lateral sides of the device, not as between the ends as the claims would appear to recite."

Claims 2, 4 and 13 have been amended to clarify that the longitudinal axis of the screw holes and bores on the first end diverge from one another and that the longitudinal axis of the screw holes and bores on the second end diverge from one another.

**Rejection under 35 USC 102(b)**

Claims 1 through 4 stand rejected under 35 U.S.C.102(b) as being anticipated by Mangione et al. The Examiner's position is respectfully traversed.

Mangione et al discloses a backbone osteosynthesis system for anterior fixing comprising first and second arms, each capable of receiving bone screws and a longitudinal plate for rigidly linking the arms, the plate being in one single piece with one of the two arms. The plate provides a means to adjust the location of other of the two arms. The Examiner states that Mangione et al discloses screws having a leading end with flutes and are configured for engagement with vertebrae bone. Applicant cannot find this feature depicted, described or suggested in the Mangione et al reference. In addition, the plate disclosed by Mangione et al lacks any provision for locking the anchoring screws into place.

In contrast, the anterior cervical plate of the instant invention, as amended, includes a slot 17 formed as a cavity within the bone plate 14 which prevents the bone screws from backing out. Applicant' device discloses a screw lock slot 17 in both the arms 19 and 20 of bone plate member 14 which is formed in

the shape of a block letter "C". Each slot 17 extends from a side wall, located between a proximal and distal surfaces of the plate, in each of the arms 19 and 20 through a cavity in each arm respectively and opens up into the area of countersunk depressions 15 surrounding the screw holes. This limitation is neither explicitly shown nor suggested by the Magione et al reference. The utilization of a slot formed completely within the bone plate provides a unique, simple, sturdy, and cost effective construction that also results in the reduction of the overall profile of the plate. Additionally, applicant's screws 11 have a number of flutes, 25, in the side wall dividing the proximal circumference into segments 26. This feature produces a cutting or sweeping function in the bone-screw interface by collecting debris as the screw is inserted to provide a smooth bore in the bone for the following threads. As noted above, Magione et al is silent with respect to this feature which is set forth in claim 3.

It is well established that in order for a claim to be anticipated each and every element as set forth in the claim must be found, either expressly or inherently described in a single prior art reference (see MPEP 2131). Thus it is respectfully submitted that the structural limitations of the instant invention distinguish over the prior art of record and the Applicant requests that this

rejection be withdrawn and the claims be allowed to issue.

**Rejection under 35 USC 103(a)**

Claims 5 through 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mangione et al in view of Assaker. The Examiner's position is respectfully traversed.

As discussed above, Mangione et al discloses a backbone osteosynthesis system for anterior fixing. Magione et al includes first and second arms which receive bone screws and an adjustable longitudinal plate for rigidly linking the arms. The device however does not provide a mechanism for locking the screws in place thereby preventing the possibility of the screws backing out of the bone.

The Examiner has cited and applied the Assaker et al for it's showing of "... a spinal plate 1 comprising a slot 26a between distal and proximal surfaces and slidable screw locks 22 within the slots and depressions in order to prevent the screws from backing out, without increasing the size of the plate, and to improve the reliability and safety of the device...". In contrast, the slot of the present invention, as amended, recites that said slot in the first end and said slot in the second end are each formed as a

cavity completely enclosed between said proximal and distal surfaces. The slot of Assaker et al is open at both the proximal and distal surfaces and does not disclose an enclosed cavity between the two surfaces as presently claimed. The utilization of a slot formed completely within the bone plate provides a unique, simple, sturdy, and cost effective construction that also results in the reduction of the overall profile of the plate.

As regards claim 14, applicant's screws 11 have a number of flutes, 25, in the side wall dividing the proximal circumference into segments 26. This feature produces a cutting or sweeping function in the bone-screw interface by collecting debris as the screw is inserted to provide a smooth bore in the bone for the following threads. Magione et al and Assaker et al are silent with respect to this feature which is set forth in claim 14.

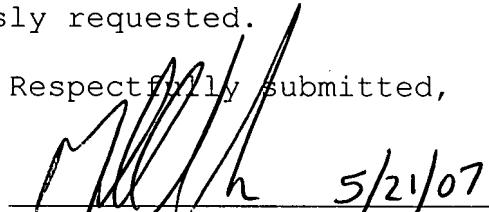
Claim 16, as amended, calls for the extension to pass through a side wall of the plate wherein the side wall connects the proximal and distal surfaces. In the Outstanding Office Action the Examiner has read flange 25 of Assaker et al on applicant's claimed extension which slidably passes through the first and second end whereby said screw lock may be removed. The invention as now

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claimed defined over the structure disclosed by Assaker et al. It is further noted that Assaker et al lacks any teaching regarding flange 25 in the context of removing the lock from the plate.

SUMMARY

In light of the foregoing remarks and amendment to the claims, it is respectfully submitted that the Examiner will now find the claims of the application allowable. Favorable reconsideration of the application is courteously requested.

Respectfully submitted,  
  
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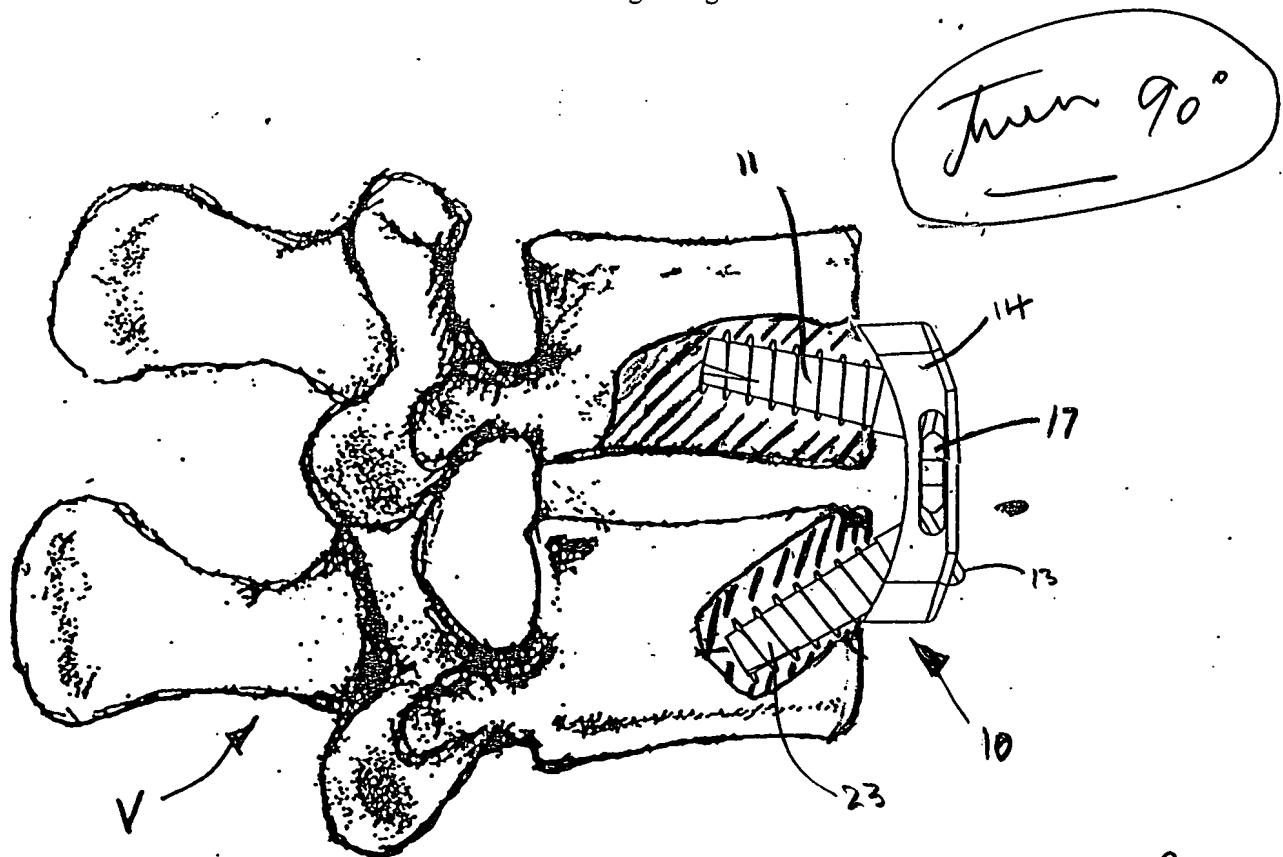


FIG. 1

FIG. 1A & FIG. 1B

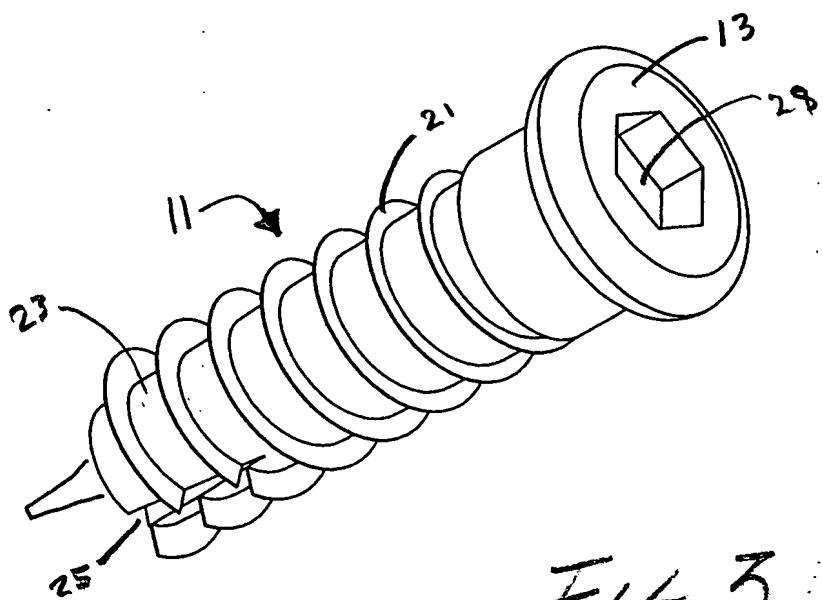


FIG. 3

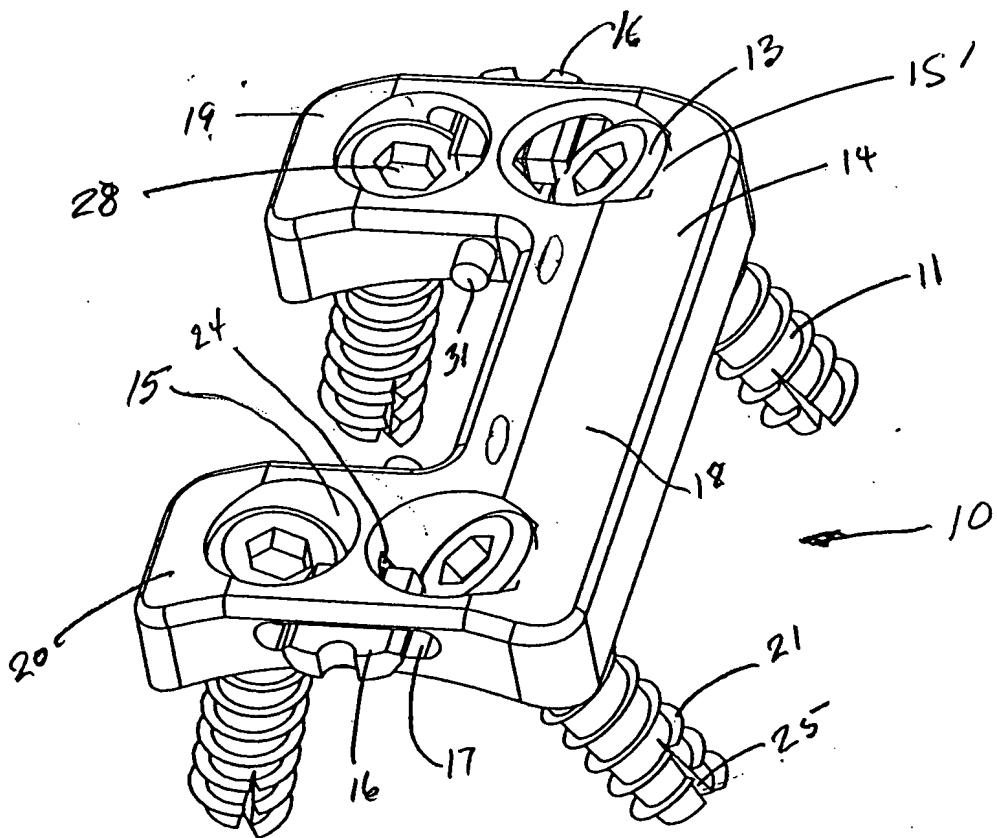


FIG. 2

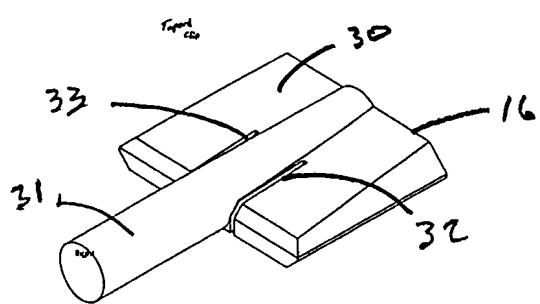


FIG 4

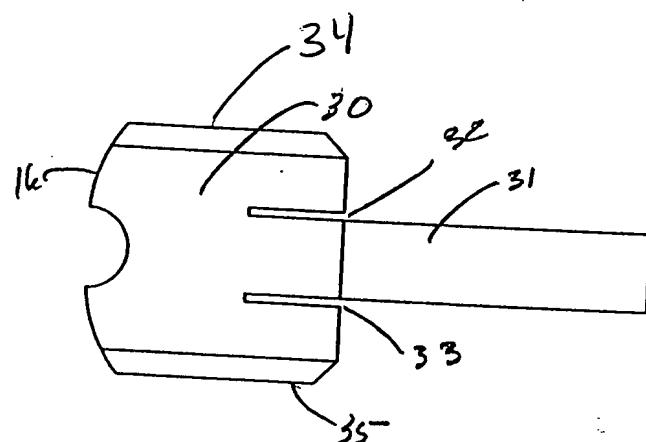


FIG 5